# GROWTH OF CLOUD TECHNOLOGIES IN FUTURE DAILY LIFE

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## ABSTRACT

cloud computing is play of significant importance to adapt to the development of information technology in education, small businesses than big ones given the fact that it reduces operational cost and brings speed, accuracy this technology plays an important role in creating a flexible, unified and open platform for education information as well as for industries, sharing of educational resources, and alleviating the information gap between different areas of education. Finally, after the analysis of the educational information technology in today's world.

**Keywords:** Cloud Computing, Architecture, challenges, applications.

## I.    INTRODUCTION

Cloud computing technology gives users access to the data wherever they have a net connection or wife connection. Smartphones, iPad desktops and laptops are increasingly commonplace classroom tools in cloud computing, which had an estimated market value of $25 billion by 2021. Flexible and cost-effective this technology helps students, teachers and administrators alike.  Cloud computing allows students access to cloud wherever there's an internet connection, teachers to instantly upload learning materials on cloud which accessible 24*7 and administrators to easily collaborate with one another and save money on data storage. Small-or large-scale business owners must get what they need right when they need it, whether they're on their computers, mobile phones – or in the office, out in the field, or on the road this research will be based on the growth of cloud market over world.

## II.    CLOUD COMPUTING ARCHITECTURE

The Cloud Computing design comprises of two layers that characterizes all the functionalities of Cloud Computing architecture. These layers are front end and back end connect via Internet.

Cloud computing architecture is simple to understand, it touches every part of our lives today in entire world, offering many advantages in terms of flexibility, storage, sharing, maintenance, etc. A standard internet connection or WIFI connection or a virtual network provides us access to cloud-based applications and services like Google Docs, Skype, and Netflix, Microsoft Team, Google Meet. Most businesses are shifting their offices into the cloud as they require significant storage, which cloud platforms provide. A cloud computing architecture provides higher bandwidth to its end users due to which data over the cloud can be used from anywhere across the world at any time. Due to its architecture, it shares resources among client source consumers but also opensource communities like Microsoft.

Cloud providers are trying and investigating every possible avenue to overcome failures in privacy, security, and trust violations.  Some of them are redesigning their processes, while others are adding more security features and more secure firewalls. To ensure CIA (Confidentiality, Integrity and Availability) of client 's data and information, cloud provider should be   offer tested encryption schema, stringent access controls and schedule backups of data and information security. Cloud infrastructure is front end which connect with back end via internet. There has been a lot of debate around the of cloud computing. it is technology which having an effect on the IT system and its inhabitants.  I believe cloud computing is to stay and cannot be avoided, let alone side-lined. It will become the future of IT infrastructure and the new IT ecosystem will be built on cloud. leaders of the IT Industry on cloud how much they are going to spend on cloud technology should be an indication to the rest of us. Cloud computing has the potential to do what Internet has done to the computing landscape on world.
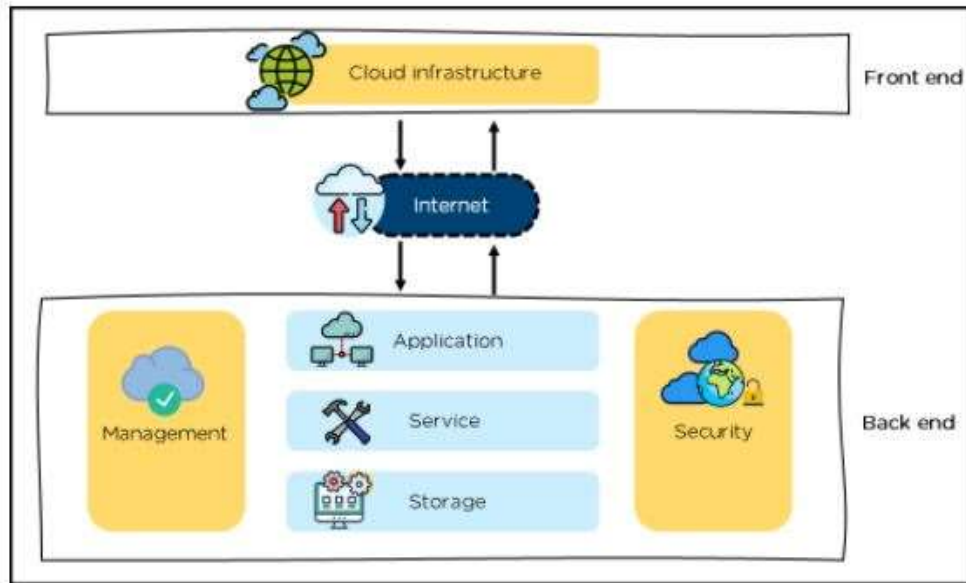
## III.    MAJOR KEY ISSUES AND CHALLENGES OF CLOUD COMPUTING

Moving the cloud does nothing to reduce dependency on IT; instead, it means that organization is dependent on service providers to do the right thing and act as good information stewards.  That means, enterprises must rely on others to manage their information and the processes that maintain, create and use the information. The shift of control over policy, architectural, operational, and assurance options from the user to the cloud service cloud provider means that the user must employ careful risk planning to choose the service that offers the best trade-off between the service provided, the level of risk, and the cost.

Security challenges related to the system complexity, Internet-enabled services, shared multi-tenancy and loss of control are pertinent to cloud computing. it might be a new way of delivering computing resources, but it is definitely not a technology. This reflects that there is nothing more to fear as most security threats are already known and already have effective security measures in place.  This could mean that cloud computing security issues are more over-reaction from sceptics aimed at stifling the adoption of cloud computing



security is an integral part of the cloud and any vulnerability present in it is a major threat for system. It is one of the major Issues of Cloud Computing. Being a user, you wouldn't want to risk your data being loss. To ensure that your data is protected, companies are working on coming up with idea to increase security. Multiple levels of authorization and secure links can be some of the initial steps to achieve a secure cloud network. There are certain rules that any organization must comply with in terms of security. each organization aims to integrate the maximum of these rules so that they can offer a safe and secure environment to its users.

- **Cost Management**

Cloud computing is quite efficient in this department. Cost management is known to offer multiple facilities without the use of any additional hardware. With the pay-as-per-use feature, the number of clients can be increased. For companies, they can keep the cost in check with the help of proper management, reports and governance. Cost management is most important for the services that the company offers and also for its

organization. As a company, you would aim to offer services to your clients and make the most profit form services. Effective cost management is only way to do that.

- **Lack of Resources**

Resources are required to successfully build and maintain an application for client. They become even more important when the application has to be outsourced to other organizations. Resources are the main foundation of any application. When it comes to cloud, software, hardware, and networking resources that would act as a medium between the company and its users are needed which increase goodwill. Lack of resources can take on the services that the organization offers. The users won't be able to avail of the services if there not enough resources. It is also important to have the proper knowledge and experience of utilizing those resources in organization. Experienced employees help the company achieve maximum productivity goals in the available amount of time and resources.

- **Governance/Control**

The service provider has control over anything related to cloud computing and its services. There are several responsibilities that service Provider have which include monitoring and safeguarding the data stored onto the clouds. People and organizations store their data onto the cloud and it is necessary to provide them a secure space for it. Proper governance is needed to ensure that quality, resources, and services are properly managed and taken care of. Cloud can be made safe n secure by including many protocols and policies that minimize its vulnerabilities.

- **Compliance**

When we purchase a digital device, we want it to be compatible with other accessories that you may have. Even when we purchase a laptop, its compatibility with the type of OS that you work on is a must. The same will goes for cloud services. To gain benefits of services, they must comply with the standard norms of compliance. Also, data stored in virtual places can be accessed and transferred from one place to another. While doing so, the host companies must comply with all the set regulations. Every organization must ensure that these rules are maintained. Problems with cloud computing can be overcome if all the rules are complied with.

- **Managing Multiple Clouds**

Many large organizations may use more than one cloud service to store and access their data. When it comes to dealing with multiple clouds or accessing data from more than one cloud, various issues can arise. Using protocols and strategies to separate and identify data from different clouds plays a major role in this situation. With correct steps and the correct approach, multiple clouds can be managed efficiently.

- **Performance**

The performance of the services offered to users has to be best. This is possible only and only if all the resources are utilized efficiently by taking all the necessary steps. The best performance of the cloud, the higher its efficiency. Many organizations collaborate to increase the performance of their products as they contribute their strengths for the same.

- **Building A Private Cloud**



A private cloud is most widely used to communicate and collaborate with the members belonging to the same organization. It offers many benefits over public clouds. The most evident is data security. Many challenges of cloud computing security are faced by any cloud offering services. A private cloud can be used as a solution to some of the problems to organization.

## IV.    MAJOR APPLICATIONS

Cloud computing in 2021 has become the go-to model for information technology as companies prioritize as service providers over traditional vendors, accelerate digital transformation projects

- **Amazon Web Services**

AWS was early leader in public cloud computing and has become a major player in AI, machine learning and serverless deployments. AWS was the first to offer cloud infrastructure as a service in 2008 and has never looked back.



AWS' ability to take database share with its approach of offering specific databases to workloads. The buildout of machine learning services and whether AWS becomes the model training platform of choice. Development of 5G, cloud. The ability to move AWS customers to its own processors. The momentum of AWS serverless instances. The vertical market battle against Azure and Google Cloud. All three are aiming for health care, but retailers are looking to Azure and Google Cloud.

- **Microsoft Azure**

We have seen digital transformation in two months. From remote teamwork to critical cloud infrastructure and security, we are working alongside customers every day to help them stay open for business in a world of remote work every time. Azure enjoys an incumbent role with enterprises as a cloud service provider, but pricing will blend multiple monetization models. The real battle between AWS and Microsoft will revolve around enterprises that go multi-cloud but want one preferred cloud service vendor. AWS or Microsoft be the preferred vendor? In that environment, Microsoft is a known commodity that can plug into Salesforce, which picked Azure for its Marketing Cloud, as well as other incumbents such as SAP, Oracle, and Adobe.



Windows Azure, which was later renamed as Microsoft Azure in 2014, is a cloud computing platform, designed by Microsoft to successfully build, deploy, and manage applications and services through a global network of data centers.

- **Google Cloud Platform**

Google Cloud Platform has been building out partnerships with enterprise players such as Salesforce, Informatica, VMware, and SAP. The company also combining its G Suite and Google Cloud sales efforts. The Google Cloud Platform strategy requires a team that can sell vertically and competes the sales know-how from AWS and Microsoft.

Google Cloud Platform will be built out its strategy, sales team, and differentiating services, and also had performance. Google Cloud is getting a lift via Google Meet and setting up a strategy to manage multi-cloud workloads.

## V.     RESULTS AND DISCUSSION

A survey was undertaken to demonstrate the cloud Computing Knowledge n scope and their awareness regarding Applications n growth

**Q] Do you know about Cloud Applications such as AWS, Google Cloud Platform, Microsoft Azure?**

the graph below illustrates that 80% of the survey respondents are known and using Application. 20% of people don't aware that they using Cloud Applications.
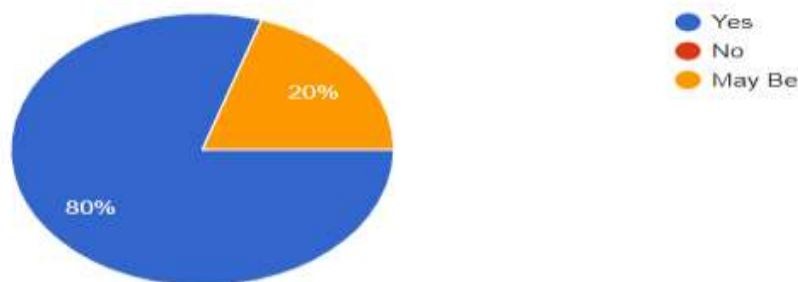


**Q] which Cloud Platform did you use?**

According to people 47.4 % people using Google Cloud Platform, 31.6 % people using all the above platforms,26.3% peoples are using AWS n Microsoft Azure.
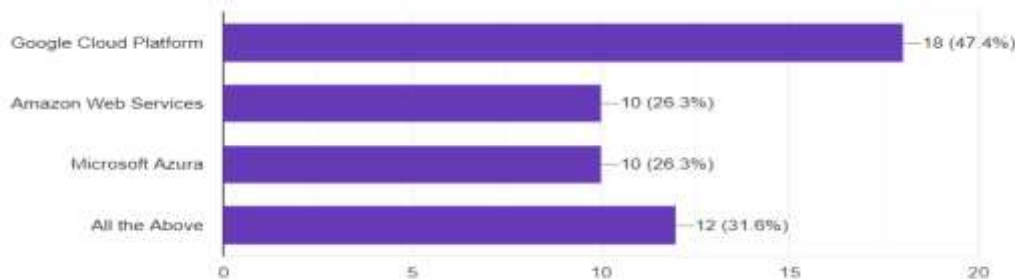


**Q] Which Conferencing Platform did you find user Friendly for Use**

According to people 38.5% people find Microsoft Team is more user friendly, 30.6 % people find Zoom n Google Meet are user friendly,17.9% people find skype is user friendly and 10.3% peoples find all platforms are user friendly to use.
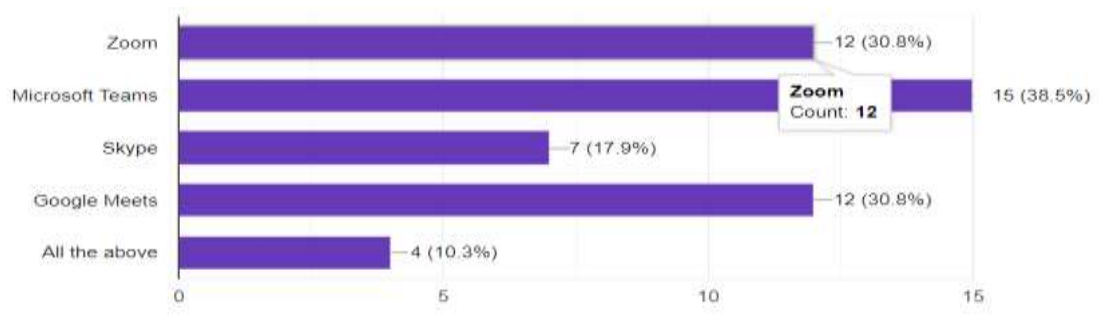
**Q] What do you think what is the reason that businesses are investing in the development of cloud technologies?**

According to people 55 % people think cost savings is the reason that businesses are investing in the department of cloud technologies,42.5% people think Market Growth in Cloud is the reason of investing,27.55 % people think cost saving and market growth both factors are involved for investing in cloud technologies.
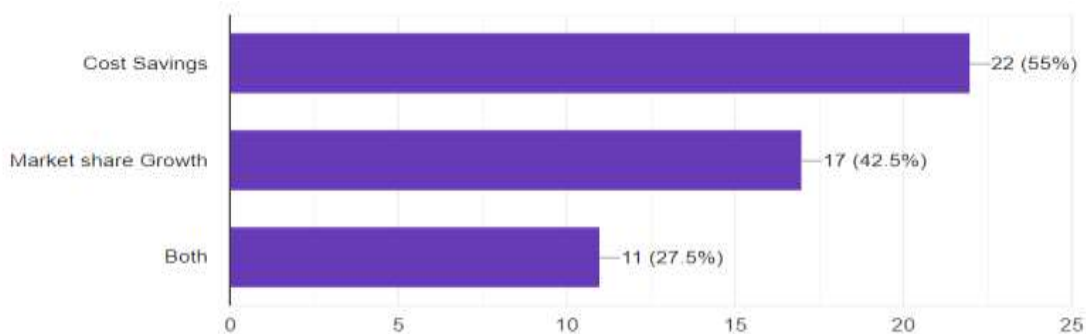


**Q] Which features make Cloud Technologies so reliable?**

According to people 36.8 % people think Security feature is main factor that cloud technology is reliable,34.2% people think availability of services are main factor,31.6 % people think storage, availability, security is main factor ,28.9% people think Storage is Main feature that make it so reliable.



## VI.　　CONCLUSION

Implementation of cloud can change the scenario of education as well as business sector. With availability of advanced sensors, better cloud platforms and high processing mobile devices it is also practical to implement such solutions. Now it is practical to design a system where most of the operations can be controlled with smart phones. All the technologies which are used in the background are scalable. We can also implement a feature where people can contact other people and will create more opportunity for employment. However, the overall system will be complex but will be much easy to maintain.

As cloud computing continues to make inroads in enterprise worlds, all stakeholders are looking to the evolution of the model. As things stand today, almost every significant innovation such as blockchain, AI, AR/VR, robotics, and IoT rely on cloud computing technology in growth of technology Cloud Computing Play major role in

development as we suffer from pandemic cloud computing give us solution of all work like education, conferences, documents sharing which will make huge revolution in future.

## VII.     REFERENCES

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